

## ECAT Pre General Science English Chapter 8 Comprehension

Sr	Questions	Answers Choice
1	<p>Have you ever wondered what keeps a hot air balloon flying? The same principal that keeps food frozen in the open chest freezers at the grocery store allows hot air balloons to fly. It's very basic principle: Hot air rises and cold air falls. So while the super-cooled air in the grocery store freezer settles down around the food , the hot air in a hot air in a hot air balloon pushes up, keeping the balloon floating above the ground. In order to understand more about how this principal works in hot air balloons, it helps to know more about hot air balloons themselves.A hot air balloon has three major parts: the basket, the burner, and the envelope. The basket is where passengers ride. The basket is usually made of wicker. This ensures that it will be comfortable and add little extra weight. The burner is positioned above the passenger's heads and produced a huge flame to heat the air inside the envelope. The envelope is the colorful fabric balloon that holds the hot air. When the air inside the envelop is heated, the balloon rises.The pilot can control the up-and-down movements of the hot air balloon by regulating the heat in the envelope. To ascend, the pilot heats the air in the envelope. When the pilot is ready to land, the air in the balloon is allowed to cool and the balloon becomes heavier than air. This make the balloon descend.Before the balloon is launched, the pilot knows which way the wind is blowing. This means that she has a general idea about which wau the balloon will go. But, sometimes the pilot can actually control the direction that the balloon flies while in flight. This is because the air above the ground is sectioned into layers in which the direction of the wind may be different. So even though the pilot can't steer the balloon, she can fly higher or lower into a different layer of air. Some days the difference between the directions of the wind between layers is negligible. But other days the difference is so strong that it can actually push the balloon in a completely different directionAs used in paragraph 4, which is the best antonym for 'descend'?</p>	<p>A. fall            B. float            C. rise            D. drop</p>
2	<p>On January 3, 1961, nine days after Christmas, Richard Legg, John Byrnes, and Richard McKinley were killed in a remote desert in eastern Idaho. Their deaths occurred when a nuclear reactor exploded at a top-secret base in the National Reactor Testing Station (NRTS). Official reports state that the explosion and subsequent reactor meltdown resulted from the improper retraction of the control rod. When questioned about the events that occurred there, officials were very reticent. The whole affair, in fact, was discussed much, and seemed to disappear with time.</p> <p>In order to grasp the mysterious nature of the NRTS catastrophe, it help to know a bit about how nuclear reactors work. After all, the generation of nuclear energy may strike many as an esoteric process. However, given its relative simplicity, the way in which the NRTS reactor functions is widely comprehensible. In this particular kind of reactor, a cluster of nine-ton uranium fuel rods are positioned lengthwise around a central control rod. The reaction begins with the slow removal of the control ro, which starts a controlled nuclear reaction and begins to heat the water in the reactor. This heat generates steam, which builds pressure inside the tank. As pressure builds, the steam looks for a place to escape. The only place this steam is able to escape is through the turbine. As it passes through the turbine on its way out of the tank, it turns the giant fan blades and produces energy.</p> <p>On the morning of January 3, after the machine had been shut down for the holidays, the three men arrived at the station to restart the reactor. The control rod needed to be pulled out only four inches to be reconnected to the automated driver. However, records indicate that Byrnes yanked it out 23 inches, over five times the distance necessary. In milliseconds the reactor exploded. Legg was impaled on the ceiling; he would be discovered last. It took one week and a lead-shielded crane to remove his body. Even in full protective gear, workers were only able to work a minute at a time. The three men are buried in lead-lined coffins under concrete in New York, Michigan, and Arlington Cemetery, Virginia.</p> <p>The investigation took nearly two years to complete. Did Byrnes have a dark motive? Or was it simply an accident? Did he know how precarious the procedure was? Other operators were questioned as to whether they knew the consequences of pulling the control rod out so far. They responded "Of course! We often talked about what we would do if we were at a radar station and the Russians came.</p> <p>"We'd yank it out."</p> <p>Official reports are oddly ambiguous, but what they do not explain, gossip does. Rumors had it that there was tension between the men because Byrnes suspected the other two of being involved with his young wife. There is little doubt than he, like the other operators, knew exactly what would happen when he yanked the control rod.</p> <p>As used in paragraph 4, which is the best synonym for "reticent"?</p>	<p>A. Slow            B. Difficult            C. Risky            D. Involved</p>

AS used in paragraph 4, which is the best synonym for precarious?

3 Cindy liked parks. She liked the trees and grass and nature. She liked the birds and squirrels she saw in parks. She also liked walking down wooded trails or riding bikes along gravel paths. Parks were a lot more fun to exercise in than just walking down the street because there was so much to see. She had been to many kinds of parks. Some were in mountains, with rivers and hiking. Some were open areas with broad stretches of green grass to play on. Others were in the forest, with paths running beneath towering trees with sweeping branches overhead. Cindy's favorite parks were near lakes. There was a lake park not far from her house. It had a boardwalk trail that was set on pilings across a shallow lake. That was the best part. She loved to walk along the brown wood path and stop along the way, looking in the water for frogs and turtles. There were a few pavilions to stop and sit under in the shade. The water was deeper near them, so she could see fish sometimes. Occasionally, she would even see long-legged water birds, like cranes. The fall was the best time to visit the lake parks. With the leaves changing color, it was very beautiful. The sun would be out in the cloudy sky, and then cool breezes would blow through the reeds and water grasses. Spring was nice, too, because all the butterflies were out. The flowers and blossoming trees along the wooded paths were fragrant and beautiful. The lake grasses were tall and green, rustling in the wind. Cattails bobbed among the reeds. It was a good time to visit. Summer was okay. It was still pretty, but too hot. At least in winter things were pretty, if in a stark and cold way. The white dusting of snow that covered everything gave the park a clean look. It was fun to follow other people's footprints in the snow, or to go out on the boardwalk and look at the frozen top of the lake. If Cindy had her way, she would visit the park every day. Come to think of it, she did it was also a great place to do homework or read.

- A. Spring
- B. Summer
- C. Fall
- D. Winter

Question:  
Which season was Cindy's most favourite to visit the park?

On January 3, 1961, nine days after Christmas, Richard Legg, John Byrnes, and Richard McKinley were killed in a remote desert in eastern Idaho. Their deaths occurred when a nuclear reactor exploded at a top-secret base in the National Reactor Testing Station (NRTS). Official reports state that the explosion and subsequent reactor meltdown resulted from the improper retraction of the control rod. When questioned about the events that occurred there, officials were very reticent. The whole affair, in fact, was discussed much, and seemed to disappear with time.

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- A. Not mentioned in any official about the incident
- B. Contaminated with toxic elements
- C. Completely annihilated
- D. Honored as a memorial to the tragic incident

The investigation took nearly two years to complete. Did Byrnes have a dark motive? Or was it simply an accident? Did he know how precarious the procedure was? Other operators were questioned as to whether they knew the consequences of pulling the control rod out so far. They responded "Of course! We often talked about what we would do if we were at a radar station and the Russians came.

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Official reports are oddly ambiguous, but what they do not explain, gossip does. Rumors had it that there was tension between the men because Byrnes suspected the other two of being involved with his young wife. There is little doubt that he, like the other operators, knew exactly what would happen when he yanked the control rod.

Based on information in the passage, it can be inferred that, after the explosion and subsequent meltdown, the reactor was

Chocolate – there's nothing quite like it, is there? Chocolate is simply delicious. What is chocolate? Where does it come from?

Christopher Columbus was probably the first to take cacao beans from the New

world to Europe in around 1502. But the history of chocolate goes back at least 4,000 years! The Aztecs, who lived in America, thought that their bitter cacao drink was a **divine** gift from heaven. In fact, the scientist Carolus Linnaeus named the plant *Theobroma*, which means “food of the gods”

The Spanish explorer Hernando Cortez went to America in 1519. He visited the Mexican emperor Montezuma. He saw that Montezuma drank cacao mixed with vanilla and spices. Cortez took some cacao home as a gift to the Spanish King Charles. In Spain, people began to drink Cortez’s chocolate in drink with chili peppers. However, the natural taste of cacao was too bitter for most people. To sweeten the drink, Europeans added sugar to the cacao drink. As a sweet drink, it became more popular. By the 17<sup>th</sup> century, rich people in Europe were drinking it.

Later, people started using chocolate in **pastries**, like pies and cakes. In 1828, Dutch chocolate makers started using a new process for removing the fat from cacao beans, and getting to the center of the cacao bean. The Dutch chocolate maker Conrad J. Van Houten made a machine that pressed the fat from the bean. The resulting powder mixed better with water than cacao did. Now, some call van Houten’s chocolate “Dutch chocolate.”

It was easy to mix Dutch chocolate powder with sugar. So other chocolate makers started trying new **recipes** that used powdered chocolate. People started mixing sweetened chocolate with cocoa butter to make solid chocolate bars. In 1849, an English chocolate maker made the first chocolate bar. In the 19<sup>th</sup> century, the Swiss started making milk chocolate by mixing powdered milk with sweetened chocolate. Milk chocolate has not changed much since this process was invented.

Today, two countries – Brazil and Ivory Coast – account for almost half the world’s chocolate. The United States imports most of the chocolate in the world, but the Swiss eat the most chocolate per person. The most chocolate eaten today is sweet milk chocolate, but people also eat white chocolate and dark chocolate.

Cocoa and dark chocolate are believed to help **prevent** heart attacks, or help keep from happening. They are supposed to be good for the circulatory system. On the other hand, the high fat content of chocolate can cause weight gain, which is not good for people’s health. Other health claims for chocolate have not been proven, but some research shows that chocolate could be good for the brain.

Chocolate is a popular holiday gift. A popular Valentine’s Day gift is a box of chocolate candies with a card and flowers. Chocolate is sometimes given for Christmas and birthdays. Chocolate eggs are sometimes given at Easter.

Chocolate is **toxic** to some animals. An ingredient in chocolate is poisonous to dogs, cats, parrots, small rodents, and some livestock. Their bodies cannot process some of the chemicals found in chocolate. Therefore, they should never be fed chocolate.

When you prevent something, you

- A. Do not let it happen
- B. Do not discuss it
- C. Do not allow it
- D. Do not stop it

5

At the time Jane Austen’s novels were published – between 1811 and 1818 – English literature was not part of any academic curriculum. In addition, fiction was under strenuous attack. Certain religious and political groups felt novels had the power to make so-called immoral characters so interesting that young readers would identify with them; these groups also considered novels to be of little practical use. Even Coleridge, certainly no literary reactionary, spoke for many when he asserted that “novel-reading occasions the destruction of the mind’s powers.”

These attitudes towards novels help explain why Austen received little attention from early nineteenth-century literary critics. (In any case a novelist published anonymously, as Austen was, would not be likely to receive much critical attention.) The literary response that was accorded to her, however, was often as incisive as twentieth-century criticism. In his attack in 1816 on novelistic portrayals “outside of ordinary experience,” for example, Scott made an insightful remark about the merits of Austen’s fiction.

Her novels, wrote Scott, “present to the reader an accurate and exact picture of ordinary everyday people and places, reminiscent of seventeenth-century Flemish painting.” Scott did not use the word ‘realism’, but he undoubtedly used a standard of realistic probability in judging novels. The critic Whately did not use the word ‘realism’, either, but he expressed agreement with Scott’s evaluation, and went on to suggest the possibilities for moral instruction in what we have called Austen’s ‘realistic method’ her characters, wrote Whately, are persuasive agents for moral truth since they are ordinary persons “so clearly evoked that we feel an interest in their fate as if it were our own.” Moral instruction, explained Whately, is more likely to be effective when conveyed through recognizably human and interesting characters than when imparted by a generalizing narrator. Whately especially praised Austen’s

- A. Refute the literary opinions of certain religious and political groups
- B. Make a case for the inferiority of novel to poetry
- C. Give an example of a writer who was not a literary reactionary
- D. Indicate how widespread the attack on novels was in the early nineteenth century

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man when imparted by a sermonizing narrator. Whitely especially praised Austen's ability to create character who "mingle goodness and villainy, weakness and virtue, as in life they are always mingled." Whitely concluded his remarks by comparing Austen's art of characterization to Dickens', stating his preference for Austen's.

Yet, the response of nineteenth-century literary critics to Austen was not always so laudatory, and often anticipated the reservations of twentieth-century literary critics. An example of such a response was Lewes complaint in 1859 that Austen's range of subject and characters was too narrow. Praising her verisimilitude, Lewes added that, nonetheless her focus was too often only upon the unlofty and the commonplace. (Twentieth-century Marxists, on the other hand, were to complain about what they saw as her exclusive emphasis on a lofty upper middle class.) In any case having being rescued by literary critics from neglect and indeed gradually lionized by them, Austen steadily reached, by the mid-nineteenth century, the enviable pinnacle of being considered controversial.

The author quotes Coleridge in order to

The history of civilization shows how man always has to choose between making the right and wrong use of the discoveries of science. This has never been more true than in our own age. In a brief period amazing discoveries have been made and applied to practical purpose.

- 7
- It would be ungrateful not to recognize how immense are the boons which science has given to mankind. It has brought within the reach of multitudes benefits and advantages which only a short time ago were the privilege of the few. It has shown how malnutrition, hunger and disease can be overcome. It has not only lengthened life but it has depended to his quality. Fields of knowledge, experience and recreation open in the past only to few, have been thrown open to million. Through the work of science the ordinary man today has been given the opportunity of a longer and fuller life than was ever possible to his grandparents.

- A. In a brief period
- B. In a long period
- C. In our forefather's age
- D. In centuries

Amazing discoveries of science have been made:

8

Recent advances in science and technology have made it possible for geneticists to find out abnormalities in the unborn foetus and take remedial action to rectify some defects which would otherwise prove to be fatal to the child. Though genetic engineering is still at its infancy, scientists can now predict with greater accuracy a genetic disorder. It is not yet an exact science since they are not in a position to predict when exactly a genetic disorder will set in. While they have not yet been able to change the genetic order of the gene in germs, they are optimistic and are holding out that in the near future they might be successful in achieving this feat. They have, however, acquired the ability in manipulating tissue cells. However, genetic mis-information can sometimes be damaging for it may adversely affect people psychologically. Genetic information may lead to a tendency to brand some people as inferiors. Genetic information can therefore be abused and its application in deciding the sex of the foetus and its subsequent abortion is now hotly debated on ethical lines. But on this issue geneticists cannot be squarely blamed though this charge has often been leveled at them. It is mainly a societal problem. At present genetic engineering is a costly process of detecting disorders but scientists hope to reduce the costs when technology becomes more advanced. This is why much progress in this area has been possible in scientifically advanced and rich countries like the U.S.A., U.K. and Japan. It remains to be seen if in the future this science will lead to the development of a race of supermen or will be able to obliterate disease from this world.

- A. Ignored
- B. Hotly debated
- C. Unanswered
- D. Left to the scientist to decide

According to the passage, the question of abortion is

9

Today, Mike and his mom are going to the library. Mike wants to find a book to read. His Mom wants to use a computer there. When they get to the library, Mike finds a book about detectives. He also finds a book with chapters about a friendly ghost. Finally, he finds a book about a man who lives in the woods without food or water. He puts the books on the front desk and waits for his mom. Mike's mom sits at one of the computers in the library. She checks her email and looks at pictures of flowers on the internet. Then she reads a news article on a website. Mike's mom leaves the computer and walks over to Mike, holding up something out for him. Mike looks at her quizzically, it takes him a moment to recognize what movie for us to watch tonight, " says Mike's mom "Sure," Mike says, now holding the movie out in front of him. He reads the cover while walking back to the library entrance. He puts his books and the movie on the front desk to check out. A librarian stands behind the counter holding an electronic scanner. "How long can we keep them?" Mike asks her. "Three weeks," says the librarian. "Cool," says Mike. Suddenly, Mike is surprised. His mother is checking out something else that is too big to put on the desk. It's a picture of the ocean. "What is that for?" Mike asks. "To put on our wall at home," says Mike's mom. "You can do that?" Mike asks. Mike's mom smiles at the librarian. "Yes," she says, " but we have to return it in three months." As used in paragraph 5, the phrase "check out" most nearly means

- A. to see
- B. to rent
- C. find
- D. buy

Where does chocolate come from? Believe it or not, it grows on trees. Not as a sweet

chocolate candy bar wrapped in foil, but as a cocoa bean. These cocoa beans grow on a cacao tree, which is found in tropical areas such as Central and South America. The fruit of these are called pods, and they are long and hard. Inside the pods is a soft, white pulp that surrounds the thirty or so seeds. These seeds are what we call cocoa beans. They are very hard and bitter to the taste. To make chocolate, people start by carefully taking the beans out of the pods, still covered in the white pulp, and leaving them in a bucket. The bucket is often covered with banana leaves and left for anywhere from a few days to a few weeks. This process is called fermenting. Then the beans are left to dry in the sun. Fermenting and drying the beans makes them less bitter. Then the beans are shipped to a factory to be turned into chocolate. At the factory, beans are roasted in ovens to bring out their flavor. After roasting, the outer covering of the bean is removed. The inner bean is then crushed to form a paste known as chocolate liquor. From this paste, people can either make cocoa powder or the chocolate we buy in stores. To make cocoa powder, the paste is crushed and pressed repeatedly to remove the fat, leaving behind only a dry, ground powder. To make chocolate, people need to add other ingredients to the paste such as milk, sugar, and cocoa butter. They then mix and heat the concoction several times to create a substance we would recognize as chocolate. It may even have fruit, nuts, or candy added to it before it is molded into a shape. Considering all that must happen to turn a bitter cocoa bean into a chocolate bar, a dollar seems like a small price to pay for such a delicious sweet treat.

Question:

According to the passage, which of these items is needed to make the chocolate that is available in stores?

- A. fruit
- B. nuts
- C. candy
- D. sugar

10

Q.5 Recent advances in science and technology have made it possible for geneticists to find out abnormalities in the unborn foetus and take remedial action to rectify some defects which would otherwise prove to be fatal to the child. Though genetic engineering is still at its infancy, a scientist can now predict with greater accuracy a genetic disorder it is not yet an exact science since they are not in a position to predict when exactly a genetic disorder will set in. While they have not yet been able to change the genetic order of the gene in germs they are optimistic and are holding out that in the near future they might be successful in achieving this feat they have however acquired the ability in manipulating tissue cells. However, genetic mis-information can sometimes be damaging for it may adversely affect people psychologically. Genetic information may lead to a tendency to brand some people as inferior. Genetic information can therefore be abused and its application in deciding the sex of the foetus and its subsequent abortion is now hotly debated on ethical lines but on this issue geneticists cannot be squarely blamed though this charge has often been leveled at them it is mainly a societal problem. At present genetic engineering is a costly process of detecting disorders but scientists hope to reduce the costs when technology becomes more advanced. This is why much progress in this area has been possible in scientifically advanced and rich countries like the U.S.A, U.K and Japan. It remains to be seen if in the future this science will lead to the development of a race of supermen or will be able to obliterate disease from this world.

k. Which of the following according to the author are the short-comings of genetics in becoming an exact science

- A. Technicians have not been able to manipulate germ cells
- B. Both A and B
- C. Either A or B

11

Lilly loves her town. She loves the mall. She loves the parks. She also loves her school. Most of all, though, Lilly loves the seasons. In her old town, it was hot all of the time.

Sometimes it is cold in Lilly's new town. The cold season is in winter. Once in a while it snows. Lilly has never seen snow before. So far her, the snow is exciting as well as very beautiful. Lilly has to wear gloves to keep her hands warm. She also wears a scarf around her neck.

In spring, flowers bloom and the trees turn green with new leaves. Pollen falls on the cars and windowsills and makes Lilly sneeze. People work in their yards and mow their grass.

In summer, Lilly wears her old shorts and sandals- the same ones she used to wear in her old town. It is hot outside, and dogs lie in the shade. Lilly and her friends go to a pool or play in the water sprinkler. Her father cooks hamburgers on the grill for dinner.

Lilly's favorite season is autumn. In autumn, the leaves on the trees turn yellow, gold, red, and orange. Halloween comes in autumn, and this is Lilly's favorite holiday. Every Halloween, Lilly wears a costume. Last year she wore a mouse costume. This year she will wear a fish costume.

One evening in autumn, Lilly and her mom are sitting together on the porch. Mom tells Lilly that autumn is also called "fall". This is a good idea, Lilly thinks, because in the fall all of the leaves fall down from the trees.

How is Lilly's new town different from her old town

I it snows in her new town

II Lilly wears different summer clothes in her new town

III Lilly wears a Halloween costume in her new town

- A. I only
- B. I and II only
- C. II and III only
- D. I, II, and III

12

The history of the modern world is a record of highly varied activity, of incessant change, and of astonishing achievement. The lives of men have, during the last few centuries, increasingly diversified, their powers have greatly multiplied, their powers have greatly multiplied, their horizon been enormously enlarged. New interests have arisen in rich profusion to absorb attention and to provoke exertion. New aspirations and new emotions have come to move the soul of men. Amid all the bewildering phenomena, interest, in particular, has stood out in clear and growing pre-eminence, has expressed itself in a multitude of ways and with an emphasis more and more pronounced, namely, the determination of the race to gain a larger measure of freedom than it has ever known before, freedom in the life of the intellect and spirit, freedom in the realm of government and law, freedom in the sphere of economic and social relationship. A passion that has prevailed so widely, that has transformed the world so greatly, and is still transforming it, is one that surely merits study and abundantly rewards it, its operations constitute the very pith and marrow of modern history.

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- A. On the spirit of revenge
- B. Of the spirit of forgiveness
- C. Of larger scale wars
- D. Of the spirit of freedom

Not that this passion was unknown to the long ages that preceded the modern periods. The ancient Hebrews, the ancient Greeks and Roman blazed the way leaving behind them a precious heritage of accomplishments and suggestions and the men who were responsible for the Renaissance of the fifteenth century and the Reformation of the sixteenth century contributed their imperishable part to this slow and difficult emancipation of the human race. But it is in modern times the pace and vigour, the scope and sweep of this liberal movement have so increased unquestionably as to dominate the age, particularly the last three centuries that have registered great triumphs of spirit.

The operation of which factor constitutes the pith and marrow of modern history?

Have you ever wondered what keeps a hot air balloon flying? The same principle that keeps food frozen in the open chest freezers at the grocery store allows hot air balloons to fly. It's very basic principle: Hot air rises and cold air falls. So while the super-cooled air in the grocery store freezer settles down around the food, the hot air in a hot air balloon pushes up, keeping the balloon floating above the ground. In order to understand more about how this principle works in hot air balloons, it helps to know more about hot air balloons themselves. A hot air balloon has three major parts: the basket, the burner, and the envelope. The basket is where passengers ride. The basket is usually made of wicker. This ensures that it will be comfortable and add little extra weight. The burner is positioned above the passenger's heads and produced a huge flame to heat the air inside the envelope. The envelope is the colorful fabric balloon that holds the hot air. When the air inside the envelope is heated, the balloon rises. The pilot can control the up-and-down movements of the hot air balloon by regulating the heat in the envelope. To ascend, the pilot heats the air in the envelope. When the pilot is ready to land, the air in the balloon is allowed to cool and the balloon becomes heavier than air. This makes the balloon descend. Before the balloon is launched, the pilot knows which way the wind is blowing. This means that she has a general idea about which way the balloon will go. But, sometimes the pilot can actually control the direction that the balloon flies while in flight. This is because the air above the ground is sectioned into layers in which the direction of the wind may be different. So even though the pilot can't steer the balloon, she can fly higher or lower into a different layer of air. Some days the difference between the directions of the wind between layers is negligible. But other days the difference is so strong that it can actually push the balloon in a completely different direction. If the hot air balloon pilot wants to change directions during flight, what might he or she do to accomplish this?

14

- A. head toward a mountain peak
- B. wait for it to rain
- C. fly into a cloud
- D. fly higher

What are good parts of our civilization? First and foremost there are order and safety. If today I have a quarrel with another man, I do not get beaten merely because I am physically weaker and he can knock me down. I go to law and the law will decide as fairly as it can between the two of us. Thus in disputes between man and man, right has taken the place of might. More-over, the law protects me from robbery and violence. Nobody may come and break into my house, steal my books or run off with my children. Of course, there are burglars, but they are very rare and the law punishes them whenever it catches them.

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It is difficult for us to realize how much this safety means. Without safety those higher activities of mankind which make up civilization could not go on. The inventor could not invent, the scientist find out or the artist make beautiful things. Hence, order and safety, although they are not themselves civilization, are things without which civilization could be impossible. They are as necessary to our civilization as the air we breathe is to us; and we have grown so used to them that we do not notice them any more than we notice the air.

- A. There is disorder
- B. There is no safety
- C. There is safety
- D. There is neither safety nor order

An artist can create beautiful things only if:

The year 2006 was the golden anniversary, or the 50<sup>th</sup> birthday, of the Dwight D. Eisenhower National System of Interstate and Defense Highways. This system, usually referred to as The Interstate Highway System, is a system of freeways named after the U.S. President who supported it. The system is the largest highway system in the world, consisting of 46,876 miles (75,440 km) of freeways. The construction of the interstate highway system is an important part of American history. It has played a major role in *preserving* and maintaining the American way of life.

The interstate highway system has several major functions. One of its major functions is to **facilitate** the distribution of US goods. Because the interstate passes through many downtown areas, it plays an important role in the **distribution** of almost all goods in the United States. Nearly all products travel at least part of the way to their destination on the Interstate System. Another major function of the interstate is to facilitate military troop movement to and from airports, seaports, rail terminals and other military destinations. The Interstate highways are connected to **route** in the Strategic Highway Network, which is a system of highways that are **vital** to the U.S. Department of Defense.

Today, most of the Interstate system consists of newly constructed highways. The longest section of the Interstate system runs from Boston, Massachusetts to Seattle, Washington. It covers 3,020.54 miles. The shortest two-digit interstate is from Emery, North Carolina to Greensboro, North Carolina. It covers only 12.27 miles. All state capitals except five are served by the system. The five that are not directly served are Juneau, AK, Dover, DE, Jefferson City, MO, Carson City, NV, and Pierre, SD. The Interstate Highway System serves almost all major U.S. cities.

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EACH Interstate highway is marked with a red, white, and blue shield with the word "Interstate," the name of the state, and the route number. Interstate highways are named with one or two-digit numbers. North-south highways are **designated** with odd numbers; east-west highways are named with even numbers. The north-south Interstate highways begin in the west with the lowest odd number; the east-west highways begin in the south with the lowest even numbers. There are mile markers at each mile of the interstate system, starting at the westernmost or southernmost point on the highway. Every Interstate highway begins with the number "0". Interchanges are numbered according to their location on the highway in relation to mileage; an exit between milepost 7 and milepost 8 would be designated "Exit 7." This system allows drivers estimate the distance to a desired exit, which a road is leading off the highway. Despite the common acceptance of the numbering system on the Interstate highways, some states have adopted different numbering systems. For example, a portion of the Interstate 19 in Arizona is measured in kilometers instead of miles since the highway goes south to Mexico.

- A. National
- B. Important
- C. Expensive
- D. Audacious

Since the Interstate highways are freeways-highways that do not have signs and cross streets – they have the highest speed limits in the nation. Most interstate highways have speed limits between 65 – 75 miles per hour (105 – 120 kilometers per hour), but some areas in Texas and Utah have an 80 mile-per-hour (130 kilometer-per-hour) speed limit.

The federal government primarily funds interstate highways. However, they are owned and operated by the individual states or toll authorities in the states. The federal government generally funds up to 90% of the cost of an Interstate highway, while the states pay the remainder of the cost.

Something vital is very

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The hammer may be the oldest tool we have record of. Stone hammers-some of the oldest human artifacts ever discovered-date back as early as 2,600,000 BCE. Not only is the hammer the oldest tool, but it is also the greatest. What makes the hammer so great is its simplicity, power, and usefulness. The structure of the hammer is relatively simple-a fact largely responsible for its early invention and widespread distribution across cultures and geographic regions. The hammer is composed of two main parts: a handle and a head. The handle is used to swing the hammer. The head is used to hit other objects. While the hammer is a very simple tool, it is still able to generate tremendous power. This power results from two factors: the weight of the head, and the speed at which the hammer is swung. Every hammer (though some more than others) has a large distribution of weight at the head. When a hammer is swung, this weight pivots about the hand, which acts as a fulcrum. The handle carries the weight at a distance, acting as a lever arm, so a longer handle means increased speed. The weight of the head together with the speed generated by the lever arm is what gives the hammer so much power. The heavier the head and the faster it is swung, the more power a hammer produces. In addition to the hammer's great power, it also has an exceptionally wide range of useful applications. The purpose of the hammer -- to hit-- is a universal action that can accomplish many tasks. Let's start with the obvious: a hammer can be made to pound nails. But a hammer has many other uses as well. It can break apart hard objects such as brick or concrete. It can bend and shape metal or steel. It can gently tap objects to make small adjustments. It can be used to make sculpture or pottery. It can be used in the hot, harsh business of blacksmithing as well as in delicate operations like crafting jewelry. In times of desperation, it can even be used as a weapon. The hammer truly is a great tool. It is simple, powerful, and useful. A quintessential symbol of labor, the hammer has come to represent hard work and embody the spirit of human industry.

- A. a claw hammer, because it can be swung very fast
- B. a ball-peen hammer, because it has a medium length handle and a small head
- C. a sledge hammer, because it has a long handle and a heavy head
- D. a bush hammer, because it has a long handle and light head

Question:

Based on information in the passage it can be inferred that which of the following hammers is capable of generating the most power?

When you imagine the desert, you probably think of a very hot place covered with sand. Although this is a good description for many deserts, Earth's land with ice: Antarctica. In

- 18 order for an area to be considered a desert, it must receive very little rainfall. More specifically, it must receive an average of less than ten inches of precipitation - which can be rain, sleet, hail, or snow - on the ground every year. Antarctica, the coldest place on earth, has an average temperature that usually falls below the freezing point. And because cold air holds less moisture than warm air, the air in Antarctica does not hold much moisture at all. This is evident in the low precipitation statistics recorded for Antarctica. For example, the central part of Antarctica receives an average of less than 2 inches of snow every year. The coastline of Antarctica receives a little bit more-between seven and eight inches a year. Because Antarctica gets so little precipitation every year, it is considered a desert. When precipitation falls in hot deserts, it quickly evaporates back into the atmosphere. The air over Antarctica is too cold to hold water vapor, so there is very little evaporation. Due to this low rate of evaporation, most of the snow that falls to the ground remains there permanently, eventually building up into thick ice sheets. Any snow that does not freeze into ice sheets becomes caught up in the strong winds that constantly blow over Antarctica. These snow-filled winds can make it look as if it is snowing. Even though snowfall is very rare there, blizzards are actually very common on Antarctica. Question: Which is the best definition for precipitation?

- A. moisture in the air falls to the ground
- B. any type of weather event
- C. weather events that only happen in very cold areas
- D. a blizzard that occurs in areas with limited snowfall

19 The Baxter house is located at the end of the street. This house sits farther back from the curb than the other houses. It is almost difficult to see from the road without peering behind the deformed oak tree that has obscured it for years. Even so, the

Baxter house stands out from the other houses on the street. It is tall and white. However, this white is no longer pristinely white, but a dingy grayish cream color. Long vines hang from the tattered roof. The Baxter house is two stories tall and has a large yard in the back that has never been mowed. The other houses on the street are a mere one story and have been painted a variety of colors. The newer, single story properties all appear to have been built around the same time; the yards mostly being of the same size, and the houses appearing to be clones of one another. Aside from the Baxter house at the end, this street is a perfect slice of middle America. The inhabitants of the other houses wonder who lives in the ancient, dilapidated house at the end of the street.

- A. The other houses have large families living in them
- B. The other houses on the street are a mere one story
- C. The Baxter house is at the end of the street
- D. The Baxter house is almost difficult to see from the road

What makes the other houses on the street stand out visually from the Baxter house?

- 20 Q.2 The public distribution system which provides food at low prices is a subject of vital concern. There is a growing realization that though Pakistan has enough food to feed its masses three square meals a day the monster of starvation and food insecurity continues to haunt the poor in our country. Increasing the purchasing power of the poor through providing productive employment leading to rising income and thus good standard of living is the ultimate objective of public policy. However, till then there is a need to provide assured supply of food through a restructured more efficient and decentralized public distribution system (PDS). Although the PDS is extensive it is one of the largest such systems in the world it has yet to reach the rural poor and the far off places it remains an urban phenomenon with the majority of the rural poor still out of its reach due to lack of economic and physical access. The poorest in the cities and the migrants are left out for they generally do not possess ration cards. The allocation of PDS supplies in big cities is larger than in rural areas in view of urgently needs to be streamlined. In addition considering the large food grains production combined with food subsidy on one hand and the continuing slow starvation and dismal poverty of the rural population on the other there is a strong case for making PDS target group oriented. The growing salaried class is provided job security, regular income and percent insulation against these gains of development have not percolated down to the vast majority of our working population. If one only dearness allowance to the employees in public and private sector and looks at its growth in the past few years the rising food subsidy is insignificant to the point of inequity. The food subsidy is a kind of D.A. to the poor, the self-employed and those in the unorganized sector of the economy. It is true that subsidies should not become a permanent feature except for the destitute, disabled, widows and the old. It is also true dependence and hence is habit-forming, killing the general initiative of the people by making PDS target group oriented. Not only the poorest and neediest would be reached without additional cost but it will actually cut overall costs incurred on large cities and for better off localities when the food and food subsidy are limited. The rural and urban poor should have the priority in the PDS supplies. The PDS should be closely linked with programs of employment generation and nutrition improvement.
- j. What according to the passage would be the outcome of making the PDS target group oriented?

- A. It will abolish the imbalance of urban and rural sector
- B. It will remove poverty
- C. It will give food to the poorest without additional cost
- D. It will motivate the target group population to work more